



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,625	04/12/2004	Michael Krebs	HENK-0066/H5395	3301

38857 7590 01/07/2011
WOODCOCK WASHBURN LLP
CIRA CENTRE, 12TH FLOOR
2929 ARCH STREET
PHILADELPHIA, PA 19104-2891

EXAMINER

NILAND, PATRICK DENNIS

ART UNIT	PAPER NUMBER
----------	--------------

1762

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

01/07/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ecofficemonitor@woodcock.com



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/822,625
Filing Date: April 12, 2004
Appellant(s): KREBS ET AL.

John A. Harrelson, Jr.
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 10/18/10 appealing from the Office action mailed 6/22/10.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 1-8, 10-13, and 16-34.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN

Art Unit: 1762

REJECTIONS.” New grounds of rejection (if any) are provided under the subheading “NEW GROUNDS OF REJECTION.”

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant’s brief.

(8) Evidence Relied Upon

5994493

KREBS

11-1999

(9) Grounds of Rejection

A. Claims 1-8, 10-13, and 16-34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

i. There is not basis in the originally filed specification for requiring the new recitation “which are solid at room temperature” relating to the instantly claimed polyester-polyols. Page 7, paragraph [0020] of the originally filed specification is noted. However, it requires “Solid at room temperature” in the context of this invention means that the composition is crystalline, partly crystalline and/or vitreously amorphous...” This section relates to the composition as a whole, not the polyester polyol. While the claims have required the polyester polyol to be crystalline, partly crystalline and/or vitreously amorphous, the amorphous segments in fact indicate liquid property, as evidenced by the definition of “viscosity average molecular weight,

Art Unit: 1762

which is well known and found in basic polymer texts. The argued reference relating to what is meant by crystalline polymers is noted. The reference also states that polymers are not 100% crystalline, they are partly crystalline. In other words all polymers have amorphous regions. The appellant's characterization that partly crystalline polyols would not be expected to contain a liquid component ignores the fact that the amorphous regions are liquid components, although they may be very high viscosity polymers. See again the definition of "viscosity average molecular weight" and "amorphous". It appears that the entire document has not been provided. The examiner would be interested in considering any further references to amorphous which may be in the argued "Semicrystalline Polymers" document argued by the appellant. The examiner concedes that the viscosity is a function of temperature as is the existence of crystalline segments. The examiner notes the well known definitions of crystalline melting point and glass transition temperature in polymers. While the addition of "solid at room temperature" of the instant claims clearly differentiates the polyester polyols of the instant claims from those of the patentee, because the examiner takes the patentee's "liquid" to mean relatively low viscosity and the instant claim's "solid" to mean relatively high viscosity at room temperature, again noting the definition of viscosity average molecular weight in polymers, it was not clear from the recitation of crystalline, partly crystalline and/or vitreously amorphous of the claimed polyester polyols under what conditions, such as temperature, that they had to be crystalline, partly crystalline, or vitreously amorphous. The examiner notes that within the temperatures commonly encountered by us, water is liquid and crystalline.

The new recitation of "which are solid at room temperature" relating to the instantly claimed polyester-polyols is therefore new matter.

This rejection should therefore be affirmed.

B. Claims 1-8, 10-13, and 16-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which appellant regards as the invention.

i. It is unclear what is intended by the scope of the instant claims, particularly the instantly claimed polyalkylene diols in view of the appellant's amendment to the claims cancelling "polyether polyols", the recitation of "polyether polyol" in the instant claims 10 and 11, the clear meaning of "polyalkylene diol" in the instant claims as established e.g. at component (c), which defines them as polyether polyols, and the appellant's argument that the instantly claimed component (i)(b) does not include polyether polyols. It is unclear if there is not antecedent basis for the polyether polyols of the instant claims 10 and 11, if the polyether polyols of the instant claims 10 and 11 are limited to diols by the claimed polyether diols or if the polyalkylene diols are broadened to polyols by claims 10 and 11, particularly the recitation of polyether polyol therein, i.e. polyalkylene diols, or if the claims have some other scope.

This rejection should therefore be affirmed.

C. Claims 1-8, 10-13, 16-22, 24-25, 27-31, and 34 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-29 of U.S. Patent No. 5994493 Krebs. Although the conflicting claims are not identical, they are not patentably distinct from each other because, although the claims differ somewhat in scope, it would have been obvious to one of ordinary skill in the art to practice the instantly claimed inventions from the claims of the patentee because the patented claims encompass the instantly claimed invention. Moisture curing hot melt adhesive encompasses the instantly claimed

Art Unit: 1762

reactive adhesives. Any additional compounds of the patented claims are encompassed by “consisting essentially of”, because the appellant has not shown any additional materials of the prior art’s reaction product falling within the scope of the instantly claimed component (i) to materially affect the basic and novel characteristics of the composition per MPEP 2111.03 “The transitional phrase “consisting essentially of” limits the scope of a claim to the

specified materials or steps “and those that do not materially affect the basic and novel characteristic(s)” of the claimed invention. In re Herz, 537 F.2d 549, 551-52,

190 USPQ 461, 463 (CCPA 1976)” and “comprising” of the instant claims. The instant claims therefore encompass the additional components of the cited prior art, including the argued aromatic diol because these components have not been shown probatively to materially affect the basic and novel characteristics of the instantly claimed invention. “Different properties” contributed by the aromatic polyols of the patentee are not excluded by “consisting essentially”. All additional components are expected to contribute “different properties”. The proper test is as stated in the legal definition of “consisting essentially of” which is noted above. The appellant has not shown any additional materials of the prior art’s reaction product falling within the scope of the instantly claimed component (i) to materially affect the basic and novel characteristics of the composition per MPEP 2111.03 “The transitional phrase “consisting essentially of” limits the scope of a claim to the specified materials or steps “and those that do not materially affect the basic and novel characteristic(s)” of the claimed invention. The appellant has not made such a showing. The claims are taken as including the additional components of the prior art therefore.

The instant claims encompass using mixtures of polyether polyols of the claimed molecular weight by the language “at least one compound”. The polyol ii falls within the scope

Art Unit: 1762

of the instantly claimed polyether polyol having a Mn of less than 1000 and component i of the patentee's claim 1 falls within the scope of the instantly claimed polyether polyol having a Mn of less than 1000 when its Mn is below 1000. Note that the polyalkylene diol of the instant claims is a polyether polyol, according to the instant claims, particularly the instant claim 1, component (c) and the instant claims 10 and 11. See the prior art disclosure of polyethylene glycol, polypropylene glycol, and polytetramethylene glycol and note that all of these terms are polyether polyols of the nomenclature form polyalkylene diol, i.e. glycol. Claim 9 of the patentee recites 2,4' diphenylmethane diisocyanate. For these reasons, the appellant's arguments are not persuasive on their face regarding the instant claims. The ability to melt, indicated by "hotmelt" of the patentee indicates that the patentee's hotmelt adhesive has the properties of the reaction product of the instant claim 12. The patentee defines the claimed polyisocyanates as being the instantly claimed isocyanate at column 7, lines 1-6 of their specification and claims 9, 18 and 29. The lower molecular weight fraction of the claimed patented adhesive is the adhesion promoter of the instant claims 1, 16-17, and 22 based on the definition of average molecular weight and is capable of the claimed migration based on the definitions of viscosity average molecular weight, intrinsic and inherent viscosities. The composition of the patented claims inherently contain the instantly claimed adhesion-intensifying additive properties since these lower molecular weight polyisocyanate adducts contain groups capable of reacting with some substrate which necessarily intensifies adhesion over adhesives which give no covalent bonding and will inherently have the claimed vapor pressure since their molecular weights will also exclude volatilization to any appreciable extent. The appellant's arguments regarding what is required of inherency are agreed with. The appellant's arguments that the instant inherency

Art Unit: 1762

rejection does not meet the inherency requirements is not agreed with. All real polymer samples contain a mixture of molecules of varying molecular weights as indicated by the concept of "average molecular weight. All polymer molecules contain at least some amorphous character, which necessarily means that they can migrate. Volatility is related to molecular weight per basic organic chemistry considerations taught in undergraduate organic chemistry. Therefore some fraction of the molecules of the prior art have the instantly claimed volatility coupled with the other properties of the instantly claimed component (ii). The appellant's arguments regarding monomeric diisocyanates being volatile is not commensurate with the stated rejection therefore because it does not address these non-volatile molecular weight fractions which are not monomeric diisocyanates argued by the appellant. The claimed amounts can be thought of as being divided out of the bulk polymer without affecting the polymer of the patentee's claims which reads on the instant claims 16-17. Furthermore, the temperatures and catalysts of the patentee will necessarily give some trimerization of the polyisocyanates used in making the polymer, particularly the amine catalysts as is well documented in the art which meets the instant claim 18. The claimed NCO:OH ratios encompass those of the instant claims 4-5. Where the lower amounts of NCO are used, the free monomer contents of claims 20-21 and 24-25 are encompassed. The use of only 2,4' MDI encompasses the instant claims 6-8. Free monomeric isocyanate meets the instant claim 14. The process claims are silent regarding reaction temperature and therefore encompass all temperatures at which polyols and polyisocyanates can react, which encompasses the instantly claimed reaction temperatures of the instant claims 27-29 because these reactions are well known to occur below the claimed temperatures, particularly when catalyst is used.

Since the compositions of the patented claims are the same as the instant claims, they are expected to be inherently solid as is also indicated by “hot melt”. Claim 1 has molecular weights falling within the scope of those of the instant claims.

The appellant’s argument that Krebs requires an aromatic polyol that is excluded by “consisting” of the instant claims is not persuasive. The instant claims recite that the component (i) “consists essentially of”, not that it “consists of”. Furthermore, “at least one compound” including two or more of the recited polyols and do not exclude the polyethers from being initiated by the aromatic polyol of the reference. The appellant’s arguments that the claimed polyethers do not include the polyethylene and polypropylene glycols of column 5, lines 5-15 of the patentee are not commensurate in scope with the instant claims, which do not recite the initiator species for the claimed polyether polyols and the reaction products of the disclosed aromatic diols with the propylene and ethylene oxide will necessarily give polypropylene and polyethylene glycols which fall within the scope of those of the instant claims which do not exclude the aromatic moiety therefrom. The appellant’s arguments regarding the aromatic diols of the patentee are not commensurate in scope with the instant claims for this reason also. See claim 1 and the recitations pertinent to the polyol alkoxylation product of at least one aromatic dihydroxy compound of component aii of claim 1 of Krebs, which is encompassed by the instant claim language "polyether-polyols" and the specific polyether glycols claims, as noted above. There is no evidence that the polyurethane of Krebs contains more monomeric isocyanate than encompassed by claim 2 and does not disclose the amounts of the instant claims 6-8. The appellant’s arguments have been fully considered but are not persuasive for the reasons above. The appellant’s arguments have been fully considered but are not persuasive in view of the

Art Unit: 1762

above rejection and the claimed subject matter of the patentee. This rejection should therefore be affirmed.

D. Claims 1-8, 10-13, 16-22, 24-25, 27-31, and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat. No. 5994493 Krebs.

Krebs discloses the instantly claimed adhesives and methods of making them at the abstract; column 4, lines 23-67, particularly lines 23-25, 27-32, 40-52 and 57-60; column 5, lines 5-67 of which the “polyalkylene diols”, i.e. polyethylene glycol, polypropylene glycol, and polytetramethylene glycol of the instantly claimed molecular weights, e.g. below 1000, of lines 20-33 continues to fall within the scope of the instantly claimed component (i)(b) contrary to the appellant's argument to the contrary, per the definition of polyalkylene diol, which as is seen from the instant claims 1 and 10, component (c) is a polyether polyol, e.g. a diol in the instant case; column 6, lines 1-67; column 7, lines 1-67, particularly 1-6; column 10, lines 1-67, particularly 18-45, 53, and 53-67; column 11, lines 1-67, particularly 1-18; column 12, lines 1-67, particularly 11 and 36-39; column 13, lines 1-8; column 14, lines 1-7, particularly 5-7; and the remainder of the document. Moisture curing hotmelt adhesive encompasses the instantly claimed reactive adhesives. Any additional components of the patented claims are encompassed by “consisting essentially” of the instant claims. Any additional components of the component (i) of the instant claims remain encompassed by "consisting essentially of" because the appellant has not demonstrated any additional components of the cited prior art to materially affect the basic and novel characteristics of the compositions in which (i) recites "consisting essentially of" in a manner commensurate in scope with the instant claims and the cited prior art. See MPEP 2111.03 [R-3] Transitional Phrases.

The instant claims encompass using mixtures of polyether polyols of the claimed molecular weight by the language "at least one compound". The polyol ii falls within the scope of the instantly claimed polyether polyol having a Mn of less than 1000 and component i of the patentee's claim 1 falls within the scope of the instantly claimed polyether polyol having a Mn of less than 1000 when its Mn is below 1000. Claim 9 of the patentee recites 2,4' diphenylmethane diisocyanate. For these reasons, the appellant's arguments are not persuasive on their face regarding the instant claims. The remaining ingredients of the instant claim 1 are optional, i.e. not required. The patentee defines the claimed polyisocyanates as being the instantly claimed isocyanate at column 7, lines 1-6 of their specification and claims 9, 18 and 29.

The lower molecular weight fraction of the claimed patented adhesive is the adhesion promoter of the instant claims 1, 16-17, and 22 based on the definition of average molecular weight and is capable of the claimed migration based on the definitions of viscosity average molecular weight, intrinsic and inherent viscosities. The composition of the patented claims inherently contain the instantly claimed adhesion-intensifying additive properties since these lower molecular weight polyisocyanate adducts contain groups capable of reacting with some substrate which necessarily intensifies adhesion over adhesives which give no covalent bonding and will inherently have the claimed vapor pressure since their molecular weights will also exclude volatilization to any appreciable extent. The appellant's arguments regarding what is required of inherency are agreed with. The appellant's arguments that the instant inherency rejection does not meet the inherency requirements is not agreed with. All real polymer samples contain a mixture of molecules of varying molecular weights as indicated by the concept of "average molecular weight. All polymer molecules contain at least some amorphous character,

Art Unit: 1762

which necessarily means that they can migrate. Volatility is related to molecular weight per basic organic chemistry considerations taught in undergraduate organic chemistry. Therefore some fraction of the molecules of the prior art have the instantly claimed volatility coupled with the other properties of the instantly claimed component (ii). The appellant's arguments regarding monomeric diisocyanates being volatile is not commensurate with the stated rejection therefore because it does not address these non-volatile molecular weight fractions which are not monomeric diisocyanates argued by the appellant. The claimed amounts can be thought of as being divided out of the bulk polymer without affecting the polymer of the patentee's claims which reads on the instant claims 16-17. Furthermore, the temperatures and catalysts of the patentee will necessarily give some trimerization of the polyisocyanates used in making the polymer, particularly the amine catalysts as is well documented in the art which meets the instant claim 18. The claimed NCO:OH ratios encompass those of the instant claims 4-5. Where the lower amounts of NCO are used, the free monomer contents of claims 20-21 and 24-25 are encompassed. The use of only 2,4' MDI encompasses the instant claims 6-8. Free monomeric isocyanate meets the instant claim 14. The process claims are silent regarding reaction temperature and therefore encompass all temperatures at which polyols and polyisocyanates can react, which encompasses the instantly claimed reaction temperatures of the instant claims 27-29 because these reactions are well known to occur below the claimed temperatures, particularly when catalyst is used.

Since the compositions of the copending claims are the same as the instant claims, they are expected to be inherently solid as is also indicated by "hot melt". Claim 1 has molecular weights falling within the scope of those of the instant claims.

The appellant's argument that Krebs requires an aromatic polyol that is excluded by "consisting" of the instant claims is not persuasive. The instant claims recite that the component (i) "consists essentially of", not that it "consists of". Furthermore, "at least one compound" including two or more of the recited polyols and do not exclude the polyethers from being initiated by the aromatic polyol of the reference. The appellant's arguments that the claimed polyethers do not include the polyethylene and polypropylene glycols of column 5, lines 5-15 of the patentee are not commensurate in scope with the instant claims, which do not recite the initiator species for the claimed polyether polyols and the reaction products of the disclosed aromatic diols with the propylene and ethylene oxide will necessarily give polypropylene and polyethylene glycols which fall within the scope of those of the instant claims which do not exclude the aromatic moiety therefrom. The appellant's arguments regarding the aromatic diols of the patentee are not commensurate in scope with the instant claims for this reason also. The instant claims recite "at least one compound" including two or more of the recited polyols and do not exclude the polyethers from being initiated by the aromatic polyol of the reference. See claim 1 and the recitations pertinent to the polyol alkoxylation product of at least one aromatic dihydroxy compound of component aii of claim 1 of Krebs, which is encompassed by the instant claim language "polyether-polyols". There is no evidence that the polyurethane of Krebs contains more monomeric isocyanate than encompassed by claim 2 and does not disclose the amounts of the instant claims 6-8.

The polyether polyols of the patentee having two OH groups, i.e. diol, and the instantly claimed molecular weights fall within the scope of the instantly claimed polyether polyols having a Mn of less than 1000 and component i of the patentee's claim 1 falls within the scope of

Art Unit: 1762

the instantly claimed polyether polyol having a Mn of less than 1000 when its Mn is below 1000.

Note that the polyalkylene diol of the instant claims is a polyether polyol, according to the instant claims, particularly the instant claim 1, component (c) and the instant claims 10 and 11.

See the prior art disclosure of polyethylene glycol, polypropylene glycol, and polytetramethylene glycol and note that all of these terms are polyether polyols of the nomenclature form polyalkylene diol, i.e. glycol. The appellant's arguments that the prior art does not teach use of a compositions containing the polyols of component (i)(b) of the instant claim 1 is therefore not correct.

"Different properties" contributed by the aromatic polyols of the patentee are not excluded by "consisting essentially". All additional components are expected to contribute "different properties". The proper test is as stated in the legal definition of "consisting essentially of" which is noted above. The appellant has not shown any additional materials of the prior art's reaction product falling within the scope of the instantly claimed component (i) to materially affect the basic and novel characteristics of the composition per MPEP 2111.03 "The transitional phrase "consisting essentially of" limits the scope of a claim to the specified materials or steps "and those that do not materially affect the basic and novel characteristic(s)" of the claimed invention. The appellant has not made such a showing. The claims are taken as including the additional components of the prior art therefore.

Crystallinity arguments do not apply to the instantly claimed polyether polyols, i.e. polyalkylene diols and the final product of the patentee has the properties of the instant claim 12 as defined by "melt" of "hotmelt" as it relates to polymers.

The appellant's argument that the patentee does not teach the instantly claimed amount of monomeric diisocyanate content is rebutted by the fact that the patentee requires no monomeric diisocyanate in their final product, which reads on the instantly claimed amounts of monomeric diisocyanate. There is no probative evidence that the final product of the patentee has amounts of monomeric diisocyanate outside of the instantly amounts thereof. The argued examples of the instant specification are not the compositions of the cited prior art. The patentee is not limited to their examples. See the above cited portion of the patentee that uses only the instantly claimed diisocyanate to make their polyurethanes. Note also that the patentee stirs their reaction products in vacuo for 30 minutes at increased temperatures, which will remove volatiles. The appellant's arguments in this regard are therefore not persuasive.

The appellant's arguments have been fully considered but are not persuasive in view of the above rejection and the full disclosure of the patentee. This rejection should therefore be affirmed.

E. Claims 1-8, 10-13, and 16-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat. No. 5994493 Krebs.

Krebs discloses the instantly claimed adhesives and methods of making them at the abstract; column 4, lines 23-67, particularly lines 23-25, 27-32, 40-52 and 57-60; column 5, lines 5-67; column 6, lines 1-67; column 7, lines 1-67, particularly 1-6; column 10, lines 1-67, particularly 18-45, 53, and 53-67; column 11, lines 1-67, particularly 1-18; column 12, lines 1-67, particularly 11 and 36-39; column 13, lines 1-8; column 14, lines 1-7, particularly 5-7; and the remainder of the document. Moisture curing hot melt adhesive encompasses the instantly claimed reactive adhesives. Any additional components of the patented claims are encompassed

Art Unit: 1762

by “consisting essentially” of the instant claims. Any additional components of the component (i) of the instant claims remain encompassed by "consisting essentially of" because the appellant has not demonstrated any additional components of the cited prior art to materially affect the basic and novel characteristics of the compositions in which (i) recites "consisting essentially of" in a manner commensurate in scope with the instant claims and the cited prior art. See MPEP 2111.03 [R-3] Transitional Phrases.

The instant claims encompass using mixtures of polyether polyols of the claimed molecular weight by the language “at least one compound”. The polyol ii falls within the scope of the instantly claimed polyether polyol having a Mn of less than 1000 and component i of the patentee’s claim 1 falls within the scope of the instantly claimed polyether polyol having a Mn of less than 1000 when its Mn is below 1000. Claim 9 of the patentee recites 2,4’ diphenylmethane diisocyanate. For these reasons, the appellant’s arguments are not persuasive on their face regarding the instant claims. The remaining ingredients of the instant claim 1 are optional, i.e. not required. The patentee defines the claimed polyisocyanates as being the instantly claimed isocyanate at column 7, lines 1-6 of their specification and claims 9, 18 and 29.

The lower molecular weight fraction of the claimed patented adhesive is the adhesion promoter of the instant claims 1, 16-17, and 22 based on the definition of average molecular weight and is capable of the claimed migration based on the definitions of viscosity average molecular weight, intrinsic and inherent viscosities. The composition of the patented claims inherently contain the instantly claimed adhesion-intensifying additive properties since these lower molecular weight polyisocyanate adducts contain groups capable of reacting with some substrate which necessarily intensifies adhesion over adhesives which give no covalent bonding

Art Unit: 1762

and will inherently have the claimed vapor pressure since their molecular weights will also exclude volatilization to any appreciable extent. The appellant's arguments regarding what is required of inherency are agreed with. The appellant's arguments that the instant inherency rejection does not meet the inherency requirements is not agreed with. All real polymer samples contain a mixture of molecules of varying molecular weights as indicated by the concept of "average molecular weight. All polymer molecules contain at least some amorphous character, which necessarily means that they can migrate. Volatility is related to molecular weight per basic organic chemistry considerations taught in undergraduate organic chemistry. Therefore some fraction of the molecules of the prior art have the instantly claimed volatility coupled with the other properties of the instantly claimed component (ii). The appellant's arguments regarding monomeric diisocyanates being volatile is not commensurate with the stated rejection therefore because it does not address these non-volatile molecular weight fractions which are not monomeric diisocyanates argued by the appellant. The claimed amounts can be thought of as being divided out of the bulk polymer without affecting the polymer of the patentee's claims which reads on the instant claims 16-17. Furthermore, the temperatures and catalysts of the patentee will necessarily give some trimerization of the polyisocyanates used in making the polymer, particularly the amine catalysts as is well documented in the art which meets the instant claim 18. The claimed NCO:OH ratios encompass those of the instant claims 4-5. Where the lower amounts of NCO are used, the free monomer contents of claims 20-21 and 24-25 are encompassed. The use of only 2,4' MDI encompasses the instant claims 6-8. Free monomeric isocyanate meets the instant claim 14. The process claims are silent regarding reaction temperature and therefore encompass all temperatures at which polyols and polyisocyanates can

Art Unit: 1762

react, which encompasses the instantly claimed reaction temperatures of the instant claims 27-29 because these reactions are well known to occur below the claimed temperatures, particularly when catalyst is used.

Since the compositions of the copending claims are the same as the instant claims, they are expected to be inherently solid as is also indicated by "hot melt". Claim 1 has molecular weights falling within the scope of those of the instant claims.

It would have at least been obvious to one of ordinary skill in the art at the time of the instantly claimed invention to perform the methods and make the adhesives of the patentee such that they fall within the scope of the instant claims because the patentee's disclosure and claims encompasses the instantly claimed inventions and the instantly claimed adhesives and methods of making them would have been expected to give the properties disclosed by the patentee.

It would have been obvious to one of ordinary skill in the art at the time of the instantly claimed invention to use the component of the instant claim 23 in the adhesive of the patentee because Krebs teaches that up to 10% triisocyanate may be used at column 4, lines 40-52 and trimethylolpropane and glycerol are the most common and well known means for achieving such triisocyanate prepolymers by reacting them with the typical well known diisocyanate monomers. It would have at least been obvious to one of ordinary skill in the art at the time of the instantly claimed invention to use the adhesion promoter of the instant claim 26 because Krebs teaches the use of additives to the adhesive to enhance its properties and aminosilanes having alkoxysilane functionality are well known for giving adhesion promotion to NCO functional hot melt adhesives and would have been expected to provide this function to the adhesives of Krebs.

Since the compositions of the copending claims are the same as the instant claims, they are expected to be inherently solid as is also indicated by “hot melt”. Claim 1 has molecular weights falling within the scope of those of the instant claims. It is not seen that the higher molecular weight polyols of the patentee do not give the adhesion promotion of the instant claims 32-35 by the modulus they contribute to the final product.

The appellant’s argument that Krebs requires an aromatic polyol that is excluded by “consisting” of the instant claims is not persuasive. The instant claims recite that the component (i) “consists essentially of”, not that it “consists of”. Furthermore, “at least one compound” including two or more of the recited polyols and do not exclude the polyethers from being initiated by the aromatic polyol of the reference. The appellant’s arguments that the claimed polyethers do not include the polyethylene and polypropylene glycols of column 5, lines 5-15 of the patentee are not commensurate in scope with the instant claims, which do not recite the initiator species for the claimed polyether polyols and the reaction products of the disclosed aromatic diols with the propylene and ethylene oxide will necessarily give polypropylene and polyethylene glycols which fall within the scope of those of the instant claims which do not exclude the aromatic moiety therefrom. The appellant’s arguments regarding the aromatic diols of the patentee are not commensurate in scope with the instant claims for this reason also. The instant claims recite “at least one compound” including two or more of the recited polyols and do not exclude the polyethers from being initiated by the aromatic polyol of the reference. See claim 1 and the recitations pertinent to the polyol alkoxylation product of at least one aromatic dihydroxy compound of component aii of claim 1 of Krebs, which is encompassed by the instant claim language “polyether-polyols”. There is no evidence that the polyurethane of Krebs

Art Unit: 1762

contains more monomeric isocyanate than encompassed by claim 2 and does not disclose the amounts of the instant claims 6-8.

The polyether polyols of the patentee having two OH groups, i.e. diol, and the instantly claimed molecular weights fall within the scope of the instantly claimed polyether polyols having a Mn of less than 1000 and component i of the patentee's claim 1 falls within the scope of the instantly claimed polyether polyol having a Mn of less than 1000 when its Mn is below 1000. Note that the polyalkylene diol of the instant claims is a polyether polyol, according to the instant claims, particularly the instant claim 1, component (c) and the instant claims 10 and 11. See the prior art disclosure of polyethylene glycol, polypropylene glycol, and polytetramethylene glycol and note that all of these terms are polyether polyols of the nomenclature form polyalkylene diol, i.e. glycol. The appellant's arguments that the prior art does not teach use of a compositions containing the polyols of component (i)(b) of the instant claim 1 is therefore not correct.

"Different properties" contributed by the aromatic polyols of the patentee are not excluded by "consisting essentially". All additional components are expected to contribute "different properties". The proper test is as stated in the legal definition of "consisting essentially of" which is noted above. The appellant has not shown any additional materials of the prior art's reaction product falling within the scope of the instantly claimed component (i) to materially affect the basic and novel characteristics of the composition per MPEP 2111.03 "The transitional phrase "consisting essentially of" limits the scope of a claim to the specified materials or steps "and those that do not materially affect the basic and novel characteristic(s)" of

Art Unit: 1762

the claimed invention. The appellant has not made such a showing. The claims are taken as including the additional components of the prior art therefore.

Crystallinity arguments do not apply to the instantly claimed polyether polyols, i.e. polyalkylene diols and the final product of the patentee has the properties of the instant claim 12 as defined by "melt" of "hotmelt" as it relates to polymers.

The appellant's argument that the patentee does not teach the instantly claimed amount of monomeric diisocyanate content is rebutted by the fact that the patentee requires no monomeric diisocyanate in their final product, which reads on the instantly claimed amounts of monomeric diisocyanate. There is no probative evidence that the final product of the patentee has amounts of monomeric diisocyanate outside of the instantly amounts thereof. The argued examples of the instant specification are not the compositions of the cited prior art. The patentee is not limited to their examples. See the above cited portion of the patentee that uses only the instantly claimed diisocyanate to make their polyurethanes. Note also that the patentee stirs their reaction products in vacuo for 30 minutes at increased temperatures, which will remove volatiles. The appellant's arguments in this regard are therefore not persuasive.

The appellant's arguments have been fully considered but are not persuasive in view of the above rejection and the full disclosure of the patentee. This rejection should therefore be affirmed.

(10) Response to Argument

A. The following arguments apply to the rejection of paragraph (9) A. above:

The appellant argues that paragraph [0019] spanning pages 6-7 and paragraphs [0020] and [0023] on page 7 support the instantly claimed “solid at room temperature” regarding the polyester-polyols of the instantly claimed compound (b) in their appeal brief of 10/18/10, page 3. There is not support for “solid at room temperature”, as it is applied to the polyester-polyols of the instantly claimed compound (b), in these sections of the originally filed specification. Paragraph [0019] states “polyurethane adhesive compositions which are solid at room temperature”. This paragraph does not require the polyester-polyol of compound (b) of the instant claims per se to be “solid at room temperature”. Paragraph [0020] recites the definition of “solid at room temperature” as it applies to the “composition”. The polyester-polyol of compound (b) of the instant claims is not "the composition". The appellant argues that the examiner interprets "the composition" too narrowly. It is unseen how one interprets "the composition" as meaning only one intermediate component of the polyurethane (i) of the compositions of the instant claims. Nowhere in the originally filed specification is it stated that the instantly claimed polyester-polyol of compound (b) is "the composition". The appellant's argument is not commensurate in scope with the plain language of paragraph [0020] of the originally filed specification. Paragraph [0023] recites “crystalline, partly crystalline or vitreously amorphous” and “So that the compositions which are solid at room temperature are formed”. This paragraph never requires the instantly claimed polyester-polyol of compound (b) per se to be solid at room temperature. “[C]ompositions” clearly does not apply to the polyester-

Art Unit: 1762

polyol of component (b) of the instant claims per se. The polyester-polyol of compound (b) of the instant claims is clearly an intermediate in the polyurethane that is component (i) of the instantly claimed compositions.

The appellant argued the meaning of “crystalline” as it applies to polymers in their response of 3/24/10, particularly pointing to their argued evidence, “Semicrystalline Polymers”, Encyclopedia of Polymer Science by Li and Cheng at page 7 of their response. The examiner noted that the reference argued by the appellant during prosecution shows that polymers are not completely crystalline, they are only partly crystalline. See the first four lines of the abstract of “Semicrystalline Polymers”, cited by the appellant as evidence during prosecution. The semicrystalline nature of the polymers means that they necessarily have amorphous regions, which gives liquid character, by at least the definition of “viscosity average molecular weight”, a well known and basic characteristic in polymer chemistry. It is particularly noteworthy that the appellant’s “composition”, which is crystalline, partly crystalline, or vitreously amorphous” and “solid at room temperature”, can flow at just above 23 C, as is clearly stated by the test of paragraph [0020]. Note that if the ball can move through the polymer, the polymer must necessarily be able to flow. Thus, depending on the room temperature, which is often listed as 25 C, these “solids” can be “liquid”, as evidenced by their clear ability to flow above 23 C per paragraph [0020] of the appellant’s specification. Thus, there is evidence that “crystalline, partly crystalline, or vitreously amorphous” as applied in the instant specification is not evidence that the instantly claimed polyester-polyols of compounds (b) are “solid at room temperature”, particularly depending on what is intended by “room temperature”. The examiner further notes “liquid crystals” as showing that “crystalline” does not necessarily mean “solid at room

Art Unit: 1762

temperature”, amorphous segments can dissolve crystalline segments in polymers, and that amorphous necessarily requires flow ability, which is particularly seen when coupled with polymer concepts such as "viscosity average molecular weight".

It is noted that the patentee's polyester-polyols, which are described as liquids, can be made from the same monomers as the instantly claimed polyester-polyols of the instantly claimed compounds (b). Compare the instant specification, paragraph [0026] and the Krebs patent cited in the prior art rejections in this examiner's answer, column 4, lines 29-33, noting the molecular weights of the polyester-polyols, and column 5, lines 33-50, noting the monomers in common with the polyester-polyols described in the appellant's specification. It is noted that the monomers dictate the glass transition temperature and crystallinity. Since there is overlap between the patentee's polyester-polyols and the instantly claimed polyester-polyols of compound (b), it is seen that "crystalline, partly crystalline, and vitreously amorphous" do not necessarily require "solid at room temperature" because the patentee describes polymers of similar or the same monomer contents as being liquid though the same or similar monomer contents would dictate that the patentee's polyester-polyols are also "crystalline, partly crystalline, and vitreously amorphous". Furthermore, it is not stated at what temperature the polyester-polyol of the instantly claimed compound (b) is "crystalline, partly crystalline, and vitreously amorphous".

For the above reasons, the specification as originally filed does not convey to the ordinary skilled artisan that the appellant had possession of the invention as now claimed at the time of filing, particularly the recitation of “solid” regarding the instantly claimed compounds (b).

In any event, nothing in the originally filed specification indicates that the instantly claimed compounds (b) were required to be "solid" at the time of filing. The limitation added after filing the instant application is therefore new matter.

The appellant argues that the instant specification defines "solid at room temperature" as meaning "the compositions is crystalline, partly crystalline, and/or vitreously amorphous and has a softening point above 23 C (by the ring and ball method)." Again, this definition of "solid at room temperature" applies to the composition per se, not to the polyester-polyol of the instantly claimed compound (b). There is not a definition in the originally filed specification of the appellant that the polyester-polyol of the instantly claimed compound (b), which is crystalline, partly crystalline, or vitreously amorphous is "solid at room temperature". For the reasons stated above, crystalline, partly crystalline, or vitreously amorphous do not necessarily indicate "solid at room temperature". There is also no description of what the ring and ball softening point of the polyester-polyol of the instantly claimed compound (b) is required to be. The definition of "solid at room temperature" as it is related to the "composition" is not seen as relating to the polyester-polyol of the instantly claimed compound (b).

This rejection should therefore be affirmed.

B. The following arguments apply to the rejection of paragraph (9) B. above:

The above indefiniteness is not just a result of the appellant's amendment, as argued by the appellant. It is a result of the amendment coupled with the appellant's arguments of their response of 3/24/10, page 7, section entitled "Cancellation of Polether Polyol Language from Component "b"", the sentence containing "Applicants have removed "polyether-polyols having number average molecular weights less than 1,000" from component "b" of claim 1." coupled

Art Unit: 1762

with the applicant's arguments in their response of 3/24/10, page 10, entitled "Cancellation of Polyether Polyol Language from Component 'b'" to the effect that the instantly claimed compound (b) no longer encompasses the "polyol ii" of the patentee. However, the instantly claimed compound (b) clearly recites "polyalkylene diols having number average molecular weights less than 1,000". There is no description or definition of "polyalkylene diols" in the instant specification. The examiner notes the disclosed polyalkylene glycols, e.g. polypropylene glycols or polybutylene glycols, of the appellant's specification, paragraph [0024]. The examiner notes that "glycol" and "diol" are often used interchangeably. See the Krebs patent cited in the prior art rejections in this examiner's answer, column 7, lines 55-57, "polypropylene glycol (diol)". It is noted that parenthesis are typically used in such situations to indicate that "diol" is equivalent to "glycol". "Polypropylene glycol (diol)" does not make sense in any other context. It is noted that "propylene" and "butylene" in the exemplified polyalkylene glycols are the "alkylene of "polyalkylene".

The instant claims define the instantly claimed compound (b) "polyalkylene diols" as being polyether polyols, i.e. diols at component (c). Note that the instantly claimed component (c) recites that the polyether-polyols are polytetramethylene glycols and polypropylene glycols. It is the examiner's position that "diol" and "glycol" are synonymous. "polytetramethylene" and "polypropylene" are the "polyalkylene" portion of "polyalkylene diols". Therefore, "polyalkylene diols" is taken as meaning "polyalkylene glycols" which are polyether polyols.

Therefore, "polyalkylene diol" of the instant claims is taken as meaning "polyalkylene glycol". Since the instant application shares an inventor with the Krebs patent and the assignees are the same for the instant application and the cited Krebs patent, it would make sense that

Art Unit: 1762

similar language were used in this application and the Krebs patent. The examiner therefore has interpreted “polyalkylene diol” of the instantly claimed compound (b) as being synonymous with “polyalkylene glycol”, which are polyether polyols. Therefore, the combination of the amendment to the claims with the appellant's arguments that the amendment removed polyether polyols having molecular weights less than 1000 while the claims appeared to encompass polyether polyols, i.e. polyalkylene diols, having molecular weights less than 1000 is confusing. The examiner agrees that the definitions of the elements in claim 1 define the composition of claim 1. However, the recitation of “polyalkylene diols”, which are taken as being polyalkylene glycols, which are polyether polyols, while the applicant argues during prosecution that polyether polyols have been excluded from the claimed compound (b) is confusing. After all, the applicant can be their own lexicographer. This confusion renders the scope of the claims unclear.

It is noted that the objection under 37 C.F.R. 1.75(c) related to this rejection grounds is not appealable.

This rejection should therefore be affirmed.

C. The following arguments apply to the rejection of paragraph (9) C. above:

The appellant argues that for reasons analogous to those stated regarding the above obviousness rejection, the above obviousness-type double patenting rejection should be reversed and that an obviousness-type double patenting rejection over claims in a commonly owned patent that are patentably distinct from the application's claims is improper.

For the reasons stated in the above obviousness-type double patenting rejection and the reasons stated in paragraphs 10(D) and 10 (E) below, the instant claims are not patentably distinct from the claims of Krebs.

This rejection should therefore be affirmed.

D. The following arguments apply to the rejection of paragraph (9) D. above:

As a practical example, the examiner notes that many years ago an applicant gave him a small beaker of polymer. When I touched the polymer, it did not flow away or deflect noticeably in any manner. Reasonable people could have called it "solid". However, when I turned the beaker upside down and left it over the weekend, most of the polymer had flowed down the beaker walls, though even after several hours observation no appreciable flow had been noticed. Therefore, technically speaking, the polymer was a liquid. The point is that "liquid" and "solid" are not mutually exclusive concepts in polymers.

Many people seem to be aware of the concept of "super cooled liquids" such as silica glass. Silica glass is amorphous, which is why we can see through it. It is this amorphous character that allows apparently solid glass to flow. I'm told that after about 75 years the bottom portion of a pane of glass will be measurably thicker than the top. Again, many call it a solid though technically it is liquid of very high viscosity.

Art Unit: 1762

Again, “liquid” and “solid” are not necessarily clean cut distinctions in polymers the appellant would have you believe.

It is noted that many applicants use various melt flow tests to really establish the nature of their polymer because they appreciate the problem of using “liquid” and “solid” to describe polymers. The examiner notes the appellant's test of paragraph [0020]. It is particularly noteworthy that the appellant's “composition”, which is crystalline, partly crystalline, or vitreously amorphous” and “solid at room temperature”, can flow at just above 23 C, as is clearly stated by the test of paragraph [0020]. If the high molecular weight components of the “composition” can flow at 23 C, the lower molecular weight compounds (b) are expected to flow also and have lower viscosity at 23 C (i.e. 73.4 F). Currently my room temperature is 68 F, which the conversion program on this computer calls 20 C. It is particularly noteworthy that at about 20 C, i.e. my current “room temperature”, the polymers of the patentee which are described as “liquid” are below their glass transition temperature, i.e. they are vitreously amorphous. See the patentee, claim 1, column 10, lines 24-30. Furthermore, these “liquids” of the patentee's claim can have viscosities which are very high, e.g. up to 60,000 mPas. As in the above example the examiner witnessed, one might call these things solids at low enough room temperatures though they are technically liquids.

The instant claims define the instantly claimed compound (b) “polyalkylene diols” as being polyether polyols, i.e. diols. Note that the instantly claimed component (c) recites that the polyether-polyols are polytetramethylene glycols and polypropylene glycols. It is the examiner's position that “diol” and “glycol” are synonymous. “polytetramethylene” and “polypropylene” are

Art Unit: 1762

the "polyalkylene" portion of "polyalkylene diols". Therefore, "polyalkylene diols" is taken as meaning "polyalkylene glycols" which are polyether polyols.

Therefore, the instantly claimed "polyalkylene diols having number average molecular weights less than 1,000" are anticipated by Krebs' "polyether polyols" of column 5, lines 5-33 having number average molecular weights below 1000 and having 2 OH groups. See particularly Krebs, column 5, lines 5-9, 14-15, 16-17, noting "two OH groups", and 30-32, noting the number average molecular weights below 1000. The appellant does not argue regarding the polyether polyols of Krebs, column 5, lines 16-33 falling within the scope of the instantly claimed polyalkylene diol of the instantly claimed compound (b).

The discussion presented above regarding "liquid" and "solid" not necessarily being clearly distinguishing concepts in polymers is repeated herein. Particularly note that polymers have viscosity average molecular weights and therefore viscosities, which necessitates that they flow, even if very slowly. They are therefore liquids though they may appear solid. Though the examiner maintains that it is improper to apply the definition of "solid at room temperature" of paragraph [0020] of the appellant's specification to their compound (b), it is noted that the ball may flow through the polymer at just above 23 C in the composition. Therefore, it is expected that the ball may flow through the polyester-polyol at just above 23 C. If the ball can flow through the polymer at just above 23 C, the polymer is necessarily liquid at just above 23 C. Thus, at room temperature, which is often stated as being 25 C, the polyester-polyol of the instant claims can be liquid as is the polyester-polyol of Krebs. See Krebs, column 11, lines 33-42. Therefore, below 23 C, the polyester polyols of Krebs can be "solid" as one can apply the term "solid" to such polymers, particularly considering the very high viscosity, i.e. very low flow

Art Unit: 1762

rate, encompassed by "below 60,000 mPas" at 25 C and the effect of lower temperature on viscosity. Furthermore, the polyester polyols of the patentee can be made from the same monomers as those of the appellant's claims. Compare Krebs, column 5, lines 33-50 with the appellant's specification, paragraph [0026]. Note that the monomers used to make the polyester-polyol determine its crystallinity and amorphousness. Molecular weight, particularly viscosity average molecular weight, further determines its viscosity. It would therefore appear that the "liquid" polyester polyols of Krebs overlap with the "solid" polyester polyols of the instantly claimed compound (b).

Again, the examiner particularly points out the polymer he was given that appeared "solid" but flowed over a period of several days. It is clear to the ordinary skilled artisan that "liquid" and "solid" as applied to the instantly claimed polyester polyols and the polyester polyols of Krebs are not necessarily as distinguishing terms as the appellant's representative argues. Particularly note the flowability of the appellant's "solid at room temperature" compositions at 23 C, as required by the recited ring and ball test. Particularly, for the ball to flow through the polymer, the polymer must be flowable, i.e. liquid.

In the appellant's arguments, particularly page 6 of their appeal brief, the section entitled "Aromatic polyol component", the appellant does not argue regarding the patentee's aromatic diols not being encompassed by the appellant's claimed "polyalkylene diol", which does not exclude the aromatic moiety of the patentee's aromatic diol of column 5, lines 5-15 (encompassed in the citation of column 5 in the above rejection), noting particularly lines 5-9 and 14-15.

Art Unit: 1762

The examiner does not understand the appellant's arguments that the examiner's position in the above regard appears to be based on the examiner's understanding of a possibility that may be present in the prior art. The appellant's representative should know that the assignee and an inventor are common between the instant application and the cited patent. Someone involved could therefore have explained the cited patent to the appellant's representative. The appellant's representative should have noted column 5, lines 5-15. The ordinary skilled artisan understands the acid phenolic groups to initiate reaction with the recited propylene oxide or ethylene oxide to give ether chains "of 1-7 alkoxy units" "added per aromatic hydroxyl group" (not a "possibility" but expressly stated in Krebs, column 5, lines 5-15). This is a polyalkylene diol containing an aromatic co-monomer, which is not excluded by "polyalkylene diols" of the instantly claimed component (b) and is not based on a "possibility" but is based on the clear teachings of the cited patent, which is assigned to the same assignee as the instant application and has a common inventor. MPEP 2112 is met by the patentee, column 5, lines 5-15.

The appellant's arguments at page 8, first paragraph of their appeal brief do not show that the aromatic diol of Krebs materially affects the basic and novel characteristics of the composition. See the case law and MPEP cites in the rejection above.

"Expect different properties", "pervasive differences in properties", not expecting the product with aromatic diols to have the same properties as the compound with aliphatic diols, As is well known in the art, switching from an aliphatic to an aromatic component would affect basic characteristics of the product, such as the melting point and crystallinity of the segments containing these groups, due to the well known propensity for aromatic compounds to be oriented in a relatively flat configuration which impacts packing of molecules.", and "Thus, the

Art Unit: 1762

presence and amount of an aromatic moiety as taught in the 493 patent would impact the basic and novel characteristics of the composition.” are all not supported by probative evidence. It is noted that adding anything to a composition is expected to affect its properties. If this were the test, then “consisting essentially of” would exclude everything. Clearly, “consisting essentially of” does not exclude everything. It is not seen that the argued properties are the basic and novel characteristics of the instantly claimed compositions and it is not seen that they have been “materially” affected, as required by the case law cited in the above cited MPEP section. It is therefore not seen that “consisting essentially of” excludes the aromatic diols of the patentee, which it is noted are “polyalkylene glycols” having number average molecular weights below 1000. See Krebs, column 5, lines 5-15, particularly 5-9 and 14-15. “Polyalkylene diol” is not seen as being defined as excluding aromatic comonomers. For this reason also, the instant claims do not exclude the aromatic diols of the patentee. Even if “consisting essentially of” were shown to exclude the aromatic diols of Krebs, they are still encompassed by at least the polyalkylene diols of the instantly claimed compound (b).

The appellant argues that they have cancelled “polyether polyols having number average molecular weights less than 1,000”. The appellant has not cancelled “polyalkylene diols having molecular weights less than 1,000”, which as discussed, is taken as being “polyether polyols”. The appellant does not address this interpretation of the instantly claimed “polyalkylene diols” of the instantly claimed component (b).

The appellant argues that Krebs does not disclose the the instantly claimed low monomeric isocyanate content. Not all claims recite limitations to the monomer content. The instant specification, paragraph [0008] attributes the isocyanate monomer content to the

Art Unit: 1762

NCO/OH ratio. Krebs discloses much lower NCO/OH ratio, e.g. as low as 1.03 at column 4, lines 37-39, which stoichiometry will not leave much unreacted monomeric isocyanate and is expected to leave unreacted monomeric isocyanate in the low levels of the instant claims reciting monomeric isocyanate levels per the explanation of how NCO/OH ratio affects the content of unreacted monomeric isocyanate. The appellant presents no probative evidence to the contrary. The appellant presents only attorney argument in this regard though probative evidence is clearly required.

The appellant argues that Krebs does not disclose the use of at least 95 weight % of 2,4'-diphenylmethane diisocyanate. The prior art is not limited to its examples. The prior art is not even required to have examples. The prior art is valid for all that it teaches. See Krebs, column 7, lines 1-6, cited in the above rejection. Note particularly "The 2,4'-diphenyl methane diisocyanate may be used either as a pure isomer", which meets at least 95 weight % of 2,4'-diphenylmethane diisocyanate of the instant claims. The appellant's representative did not address this section of the patentee though it was particularly pointed out in the above rejection.

This rejection should therefore be affirmed.

Art Unit: 1762

E. The following arguments apply to the rejection of paragraph (9) E. above:

The examiner repeats the statements made in paragraph 10(D) above herein.

The above obviousness rejection meets the requirements of KSR and *Graham v. Deere*, particularly when the scope of the instant claims is properly interpreted and the cited prior art is properly interpreted as it would have been understood to the ordinary skilled artisan, as the examiner has done in the above rejection.

The teaching to “modify” the document comes from Krebs itself because the “modification” is, at worst, only one of picking and choosing. The examiner maintains that the Krebs patent anticipates the instant claims, for the reasons stated above, but maintains that the legal doctrine of allowing different legal arguments to be made, even if they contradict each other, as well as the concept that “anticipation is the ultimate in obviousness” allows both the anticipation and obviousness rejections to be made over Krebs.

The remainder of the appellant’s arguments regarding this rejection are answered in the above rejection and in paragraph 10(D) above.

This rejection should therefore be affirmed.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner’s answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Patrick D Niland/
Primary Examiner
Art Unit 1762

Art Unit: 1762

Conferees:

/David Wu/

Supervisory Patent Examiner, Art Unit 1796

/Christopher A. Fiorilla/

Chris Fiorilla

Supervisory Patent Examiner, Art Unit 1700